

Amendments to the Claims:

This listing of claims will replace all prior versions, and listings, of claims in the application:

1. (Currently Amended) A method for providing a display of an electronic mail collection, comprising:

forming at least one type of electronic mail message abbreviation from the electronic mail collection, the electronic mail collection having at least one electronic mail message;

placing the at least one type of electronic mail message abbreviation in a collection viewing cascade, wherein the collection viewing cascade includes a plurality of viewing levels for presenting the at least one type of electronic mail message abbreviation;

receiving a selected viewing level for viewing; and

displaying the collection viewing cascade at the selected viewing level,

wherein each viewing level in the collection viewing cascade offers a different degree of detail for presenting the at least one type of electronic mail message abbreviation.

2-4. (Canceled)

5. (Previously Presented) The method of claim 1, wherein forming one type of message abbreviation comprises:

decomposing each electronic mail message of the collection viewing cascade into a tree structure such that at least one child node represents at least one of a sequence of first-level material from its parent and an excerpt of another message; and

decomposing sequences of first-level material into block types.

6. (Previously Presented) The method of claim 5, further comprising:

determining which of the block types are of like type;

abbreviating within the determined blocks of like type by including only a predetermined number of lines; and

indicating where material has been removed from each of the determined blocks of like type by providing indicators.

7. (Currently Amended) The method of claim 5, wherein forming one type of message abbreviation comprises:
- concatenating at least one sequence of prose paragraphs including one or more sentences;
 - submitting the at least one concatenated sequence to a summarizer that identifies the most salient sentences of the one or more sentences included in the sequence of prose paragraphs; and
 - determining where to insert indicators by aligning the identified salient sentences with the original sentences one or more sentences in the sequence of prose paragraphs corresponding to the identified salient sentences.
8. (Previously Presented) The method of claim 1, wherein the displaying further comprises presenting a thread structure with substantive message fragments of each message embedded within the thread structure.
9. (Previously Presented) The method of claim 1, wherein the displaying further comprises presenting a thread structure with a compressed text representation of each message embedded within the thread structure.
10. (Previously Presented) The method of claim 1, wherein the displaying further comprises presenting a thread structure with an email-adapted summary of each message embedded within the thread structure.
11. (Currently Amended) The method of claim 1, further comprising:
- displaying a first frame that displays an outline view of a thread in the collection;
 - displaying a view of the thread with embedded compressed-text message forms in a second frame;
 - requesting, in the first frame, to scroll the display in the second frame to a message selected in the first frame;
 - requesting to display ~~the~~ a predecessor message of the message in the second frame; and
 - displaying the predecessor in the first frame.

12-33. (Canceled)

34. (Currently Amended) A method comprising:

creating a message collection viewing cascade including a plurality of viewing levels for presenting at least one of one or more message threads and one or more messages which are associated with one or more message threads;

abbreviating at least one of the messages associated with one of the message threads using one of a plurality of abbreviation techniques; and

formatting each abbreviated message to be displayed at one of ~~the a~~ plurality of viewing levels in the message collection viewing cascade,

wherein each viewing level in the message collection viewing cascade offers a different degree of detail for presenting the at least one or more message threads and one or more messages.

35. (Currently Amended) The method of claim 34 further comprising presenting each abbreviated message in the collection viewing cascade at one or more of the plurality of ~~the one or more~~ viewing levels.

36. (Previously Presented) The method of claim 34 further comprising:

forming a substantive message fragment for a first message in the one or more message threads using one of the abbreviation techniques; and

formatting each message thread and corresponding substantive message fragment to be displayed in the message collection viewing cascade.

37. (Currently Amended) The method of claim 34 further comprising:

sorting a plurality of message threads based upon a number of messages in each message thread; and

formatting the sorted message threads to be displayed at one or more of the plurality of ~~the one or more~~ viewing levels.

38. (Previously Presented) The method of claim 37 wherein sorting the message threads further comprises sorting the message threads in order of largest to smallest with respect to a number of messages in each message thread.

39. (Previously Presented) The method of claim 34 further comprising associating subject line information with each message thread.

40. (Previously Presented) The method of claim 34 further comprising:
forming a substantive message fragment for each message in one of the message threads using one of the abbreviation techniques; and
formatting each substantive message fragment of the one message thread to be displayed in the message collection viewing cascade.

41. (Previously Presented) The method of claim 34 wherein abbreviating at least one of the messages further comprises decomposing the message into a tree structure with at least one parent node, each parent node having at least one child node, each child node representing a sequence of first-level material with respect to a corresponding parent node or representing an excerpt of another message.

42. (Previously Presented) The method of claim 41 wherein one of the plurality of abbreviation techniques comprises:

locating an excerpt of another message in each child node for each message;
replacing each located excerpt with a set of indicators; and
forming a substantive message fragment of the one message by removing all but a set number of lines from the one message, a remaining set number of lines following each set of indicators.

43. (Previously Presented) The method of claim 41 wherein one of the plurality of abbreviation techniques comprises:

shortening an excerpt of another message in each child node for each message;
decomposing sequences of first-level material in each child node into a plurality of blocks, each block representing one of a plurality of text types;
eliminating at least one of the blocks which include extraneous material; and
concatenating at least one shortened excerpt with at least one remaining block for each message while preserving an original order of the shortened excerpts and the remaining blocks within each message to form a compressed text form of the message.

44. (Previously Presented) The method of claim 41 wherein one of the plurality of abbreviation techniques comprises:
- shortening an excerpt of another message in each child node for each message;
 - decomposing sequences of first-level material in each child node into a plurality of blocks, each block representing one of a plurality of text types;
 - eliminating at least one of the blocks which include extraneous material;
 - differentially summarizing at least one remaining block based upon the text type represented by each block; and
 - concatenating at least one shortened excerpt with at least one summarized block for each message while preserving an original order of the shortened excerpts and the summarized blocks within each message to form an e-mail adapted summary of the message.
45. (Previously Presented) The method of claim 34 further comprising:
- receiving a selection of a viewing level with respect to viewing the message threads in the message collection viewing cascade; and
 - displaying at least a portion of the message threads at the selected viewing level in one of a plurality of frames in a display area.
46. (Currently Amended) The method of claim 34 further comprising:
- displaying in a first frame ~~in the plurality of frames~~ an outline view of one of the message threads;
 - displaying a view of the one message thread with embedded compressed-text message forms in a second frame;
 - requesting, in the first frame, to scroll the display in the second frame to one of the messages in the one message thread;
 - requesting, in the second frame, to display a predecessor message of the one message; and
 - displaying the predecessor message in the first frame.
47. (Previously Presented) The method of claim 34 wherein each message comprises an electronic mail message.

48. (Currently Amended) A method comprising:
creating a plurality of message threads;
sorting the message threads based upon a number of messages in each
message thread; and
formatting the sorted message threads to be displayed at one or more of a
plurality of viewing levels in a collection viewing cascade,
wherein each viewing level in the collection viewing cascade offers a different
degree of detail for presenting the sorted message threads.

49. (Previously Presented) The method of claim 48 further comprising associating
subject line information with at least one of the message threads.

50. (Previously Presented) The method of claim 48 wherein sorting the message
threads further comprises sorting the message threads in order of largest to smallest with
respect to a number of messages in each message thread.

51. (Previously Presented) The method of claim 48 further comprising presenting
the sorted messages in the collection viewing cascade at the one or more selected viewing
levels.

52. (Previously Presented) The method of claim 48 further comprising:
abbreviating at least one of the messages associated with one of the message
threads using one of a plurality of abbreviation techniques; and
formatting the abbreviated messages to be displayed at one or more of the
plurality of viewing levels in the message collection viewing cascade.

53. (Previously Presented) The method of claim 52 further comprising:
forming a substantive message fragment for a first message in at least one of
the message threads using one of the abbreviation techniques; and
formatting each message thread and corresponding substantive message
fragment to be displayed in the message collection viewing cascade.

54. (Previously Presented) The method of claim 48 further comprising:
receiving a selection of one of the viewing levels with respect to viewing the
message threads in the message collection viewing cascade; and
displaying at least a portion of the message threads at the selected viewing
level in one of a plurality of frames in a display area.

55. (Previously Presented) The method of claim 48 wherein each message
comprises an electronic mail message.